REVISION OF THE AUSTRALIAN SPECIES OF THE LEPIDOPTEROUS GENUS TERIAS, WITH DES-CRIPTIONS OF SOME NEW SPECIES;

BY W. H. MISKIN, F.E.S.

The excessive variability of individua's will in some degree account for the numerous, so called, species of this very difficult genus, and it is on'y by means of comparison of a long series of examples collected and carefully observed over a considerable period that anything approaching certainty can be arrived at in determining the title to specific rank. It is much to be lamented that a too eager desire to figure as the author of new species prompts many Entomologists to rashly proclaim every slightly varying form that com's under their notice, in many instancesrepresented by a single specimen, a new species, and so swell the already overburdened list of synomyms. driving the student to the limit of despair in his futile endeavours to reconcile his specimens with: the various descriptions.

It is with the view of trying to simplify the subject, so far as local forms are concerned, and to show at a glance a reliable list of the species and their claim to specific rank, with a full synomymy that the following notes are written.

T. DRONA, Horsfield. (nec Wallengren.)
Cat. Lep. E. I. C., p. 137, n. 64, T. 1, f 13 (1829).
Bois.—Sp. Gen: 1 p. 675, n. 37 (1836).
Moore.—Lep: Ceylon p. 120, T. 46, f. 3, 3 a (1880-1).
Butler.—An. Mag. N.H. (5). Vol. 17, p. 213 (1886).
T. Australis, Wall —Trans: Ent. Soc Ser. III. Vol. IV.
p. 321, n. 9 (1867).

T. Lerna, Feld.—Sitz. Ak. Wiss. Wien. Math. Nat. CI. XL. p. 448, n. 2 (1860).

Feld.—Reise. Nov. Lep. II, p. 212, n. 227 (1865). Zoraide, Feld.—Reise. Nov. Lep. II, p. 212, n. 227 (1865). DESCRIPION OF SOME NEW SPECIES, BY W. H. MISKIN, F.E.S. 257

Cingala, Moore.-Lep. Ceylon. p. 120, T. 46, f. 4, 4 a, (1880-1).

Rama, Moore,-Lep. Ceylon. p. 121, T. 46, f. 5, 5 a (1880-1.)

This species appears well distinguished from the African form *Brigitta (Cramer)*, more particularly by the fawn coloured underside of the latter in which respect our *Herla (Macleay)* bears a close resemblance although differing entirely on the upperside.

The species is the commonest in Queensland and does not appear to have a wide range, being in fact, I believe limited to this colony.

T. HERLA, Macleay.

Pier, H.-King's Surv. Aust. II., p. 460, n 144 (1827).

Ter, H., Bois.-Sp. Gen. I., p. 660, n. 13 (1836).

T. Hcspera, Butl.-Ann. N.H. (5) XVII, p. 214 (1886).

This may be called a rather uncommon species and is restricted to Queensland.

T. SANA, Butler.

Proc. Zool. Soc., p. 470 (1877).

This insect I do not recognize from the description as being one with which I am acquainted.

T. LINEATA. n. sp.

UPPERSIDE — Primaries.—Somewhat angulated apically; rich sulphuryellow; base dusted with black specks; costa at short distance from base. apical area widely, outer border to last median widely, thence finely to angle, shining brown; inner edge of brown brown band which is arched, slightly sinuated.

Secondaries.—With a narrow somewhat interrupted brown band, from apex, where it is widest, nearly to anal angle.

UNDERSIDE—*Primaries*.—With the costal margin broadly and outer margin, for a short distance from apex, fawn coloured ; rest of wing sulphur yellow ; all somewhat clouded with minute black speeks.

Sconaaries.—Wholly fawn coloured; considerably clouded with fine black specks; a sharply defined, perfectly straight, brown line across the wing from apical angle to middle of abdominal margin; below this another parallel with it but not reaching either margin.

Thorax and abdomen, above, black ; beneath yellow.

Exp. 1 12 in. Hab. N. Queensland. Coll: Lucas.

There are two specimens of this very distinct species in the collection of Dr Lucas of Brisbane; these differ slightly in the development of marginal bands on upperside, especially in secondaries.

The underside more particularly in secondaries bears a close resemblance to Lacta (Bois,) = Jaegeri (Men,) the form of the wings also somewhat approaches that species although not nearly so sharply angulated.

T. IMMACULATA, n. sp.

UPPERSIDE — Primaries.—Gamboge-yellow; base of costa greyish; costal margin narrowly and apical region broadly, tapering to nearly a point at lower median branch, shining brown; inner margin of band arched and slightly sinuate towards termination; a small point at hinder angle.

Secondaries.—Same colour as in primaries, with small marginal brown points at termination of nervules. Fringe of both wings with a slightly reddish tinge.

UNDERSIDE. - Of both wings sulphur-yellow, absolutely without markings: very sparsely clouded with fine black specks.

Thorax and abdomen, above black ; beneath pale yellow.

Exp. $1\frac{6}{12}$ in. Hab.-Rockhampton. (Queensland.)

Coll --- Miskin.

Form and appearance on upperside of T. Herla.

T. SMIILAX, Don.

Pap: S.—Ins. N.H., T. 20, f. 3 (1805).

Ter: S., Bois.-Sp. Gen. I, p. 660, n. 12 (1836).

Xan: S, Bois.-Voy. Astr. Lep., p. 59, n. 1 (1832).

Luc.-Lep. Ex T. 39, f. 2 (1835).

Tepper — Trans Roy. Soc., S. Aust. Vol. IV., p. 27, T. III, f. 7 (1882).

T. Ingana, Wall.—Trans Int. Soc. L. Ser. III. Vol. IV., p. 332, n. 10 (1867).

Butler.—Brenchley's Cruise of Curacoa, p. 470, T. 49, f. 3 (1873).

T. Smilax, Butler .- An. Mag. N.H. (5) XVII.; p. 214 (1886).

T. Sinta, Wall.—Trans. Ent. Soc. L. Ser. III., Vol. IV. / p. 332, n. 11 (1867).

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This is the type of a group of small butterflies very difficult to distinguish, owing to the extreme variability in the markings, both in the marginal bands of upperside, and transverse broken bands of secondaries in underside. It is not without some misgivings that I have separated them into three species, one of which I am compelled to consider as hitherto undescribed for the reasons given in the description hereafter following. Although differing considerably in the greater or less development of the outer marginal bands of primaries, it is the underside of secondaries that, upon examining a long series of specimens, present the infinite gradations of variability that make them so perplexingly difficult to separate; from a clear yellow, to a complete y clouded grey ground colour, and from a few scattered almost indistinct brown specks to a complete series of developed brown broken bands with all the intermediate gradations, are met with in a sufficiently numerous set of examples.

The species is common and ranges through Queensland, N.S. Wales, Victoria and S. Australia.

Butler (An. Mag. N. H.,) seems to doubt the correctness of Donovan's habitat for his type, why, does n t appear.

T. PARVULA, Herr Schaff.

Stett Ent. Zeit, p. 78, n 51 (1869).

This species is distinguishable by the almost entire absence of markings on underside of secondaries, there being but a few dark specks towards the base.

It is from Rockhampton, and appears a local species.

T. VARIUS, n. sp.

UPPERSIDE.—Sulphur yellow, richer towards base, which is briefly suffused with black. *Frimaries.*—Costa very narrowly, apical area broadly to the first median branch from whence it is abruptly nurowed to the lower median, shining **bo**vn; an almost invisible *C*isco-cellular speck. *Secondaries*—With very minute brown specks at termination of nervules.

some specimens almost obsolete.

UNDERSIDE, *Primaries.*—Light sulphur yellow; extremity of apex and an irregular oblong sub-apical patch which connects at point of apex, light shining brown; a brown speck within and near end of cell.

Secondaries.—Clouded with fine brown specks; various markings in light reddish brown, arranged as follows: - A small ring above the cell a short distance from base, and two others, rather indistinct each below the other and equidistant, towards abdominal border; an irregular row of spots transversely a little before the cent:e, the upper one being the largest and most distinct; a transverse broken band parallel with outer border, at about three-fourths.

Exp. $1\frac{3}{12}$ — $1\frac{4}{12}$ in. Hab.—Brisbane, Rockhampton. Coll —Miskin.

This little species is very near to *Smulax (Don)*, closely resembling it on upper-side, but differing very materially on the under.

T. VIRGO, Wallace.

Trans. Ent. Soc., Lon. Ser. III. Vol. IV., p. 328, n. 35 (1867.)

This beautiful species is restricted in Australia to Cape York, but I have seen specimens from Solomon Islands—Wallace's specimens are from Aru Islands.

Wallace's description is unsatisfactory as it can only be made out by comparison with descriptions of *two* other species—*Puella* (Bois), and Candida (Bois), I therefore append a full description.

& UPPERSIDE .-- With wings bright golden-yellow, with broad outer marginal band of black.

Primaries.— With the costa narrowly black; the marginal band commencing about a third before the apex, and continuing widely to the hinder angle, arched on inner-side but entire.

Secondaries.—With the marginal band equally broad except at apical and anna' angles; no abdominal band.

UNDERSIDE—The colours slightly paler, otherwise exactly as above.

 \bigcirc Precisely as in \Im in all respects, except that the upper side is pure white instead of yellow, and the marginal ban is a trifle wider.

Thorax and abdomen, above, dark brown ; beneath light grey.

Exp. $J_{12}^{8} \neq l_{12}^{10}$ in.

This species differs from *Puella* in the 2 being white, and from *Candida* in the absence of abdominal band in secondaries.

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T. HECABE, L.

(Pap. H.)—Mus. Ulr. p. 249 (1764); Syst. Nat. 1. 2, p. 763, n. 96 (1767).

Cramer,—Pap. Ex. II. T. 124, f. B. C. (1779; Swainson.— (Ter. H.) Zool. Ill. I. T. 22 (1820); Horsf.—Cat. Lep. E. I. C. p. 135, n. 60. T. I. f. 12 (1829); Bois.—Sp. Gen. I. p. 669-70, n. 27, (1836.)

Fab.—Syst. Ent. p. 472, n. 125 (1775); Sp. Ins. p. 42, n.
178 (1781); Mant. Ins. p. 19, n. 201 (1787); Ent. Syst. III.
p. 192, n. 598 (1793); Edwards.—Glan. d'Hist. Nat. I. pl. 253.

Roemer.—Gen. Insect. T. 15, f. 7. (1789); Godart.—Enc. Meth. IX. p. 134, n. 51 (1819); Murray.--Proc. Ent Soc. Lon, p. VII. (1875).

Butler.—Trans. Ent. Soc. Lon. p. 197, T. VI. (1880); Ann. & Mag. N. H. (5). Vol. 17, p. 212, T. V. (1886); *Moore.*—Lep. Ceylon, p. 118, T. 45, f. 1, la (1880-1); *Distant.*—Rhop. Malay, *Distant*, Rhop Meley. p. 304, T. XXVI., ff. 11, 15, 19 (1882-6).

T. Sari, Horsf.—Cat. Lep. E. I. C. p 136, n. 61 (1829); Distant.—Rhop. Malay. p. 305, T. XXV. f. 3, T. XXVI. f. 3, 7 (1882-6).

T. Suava, Bois.—Sp. Gen. I, p. 670, n. 28 (1836).

T. Hecabeoides, Men.—Cat. Mus. Petr. Lep. I. p. 85, t. 2, f. 2 (1855),

Moore.—Lep. Ceylon, p. 119, T. 45, f. 3, 3a, b. (1880-1)

T. Anemone, Feld.-Wein. Ent. Mon. V f. p. 23, n. 7 (1862).

T. Sengalensis, Hub.-Zutr. Ex. Schmett. f. 969, 970 (1837).

T. Brenda, Doubl. Hew.-Gen. D. L. T. 9, f. 6 (1847).

Hopf.-Pet. Reise. Zool. V. p. 367 (1862).

T. Æsiope, Men.—Cat. Mus. Petr. Lep. I. p. 85, T. 2, f. 3 (1855).

T. Eumide, Feld.-Reise. Nov. Lep. II. p. 214, n. 231 (1865).

Xanth, Floricola, Bois,-Faun. Mad. p. 22, n. 3, T. 2, f. 6 (1833).

T. F., Bois.—Sp. Gen. I. p. 671, n. 29 (1836)

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T. Candace, Feld.—Reise. Nov. Lep II. p. 213, n. 228 (1865).

T. Simulata, Moore.—Lep. Ceylon, p. 119, T. 45, .f. 2, 2a. b. (1880-1).

Citrina, Moore.-Lep, Ceylon, p. 119, T. 45, f. 4, 4a. (1880-1).

Rotundulis, Moore.—Lep. Ceylon, _F. 120, T. 46, f. 1, 1a. b. (1880-1).

Uniformis, Moore.—Lep, Ceylon, p. 120, T. 46, f. 2, 2a, b. (1880-1).

T. Vallivotans, Butler.—An. Mag. N. H. (5) Vol. XI. p. 420, n. 71 (1883).]

Distant.— Rhop. Malay. p. 306, n. 4, T. XXVI., f. 17 (1882-6). T. Pumilaris, Butler.—Proc. Zool. Soc. p. 617, n. 36, T. 67,

f. 7 (1875); Trans. Lin. Soc. Ser. 2, Zool. Vol. 1., p. 550, n. 5 (1877). Distant.—Rhop. Malay. p. 306, T. XXVI., f. 10 (1882-6).

T. Phœbus, Butler.—An. Mag. N. H. (5), XVII. p. 22I, T. V. f. 4. (1886).

This widely distributed and exceedingly variable species is common throughout Queensland; it is one of the most abused by the species makers. I have had the advantage of raising it from the larva, and from the same brood had specimens in which the oblong apical patch of underside of primaries was developed to the fullest extent, and in others was entirely absent, presenting also considerable variations in the development of the marginal bands on the upper-side. The infinite variability of the species is well illustrated by Mr. Butler in his paper upon Japanese forms of the genus (Trans. Ent Soc., Lon., 188?, p. 197. T. VI,) wherein his contention seems to be that the excessive variability is due to hybridization, surely a very unsatisfactory conclusion, because if such a theory be maintainable then good bye for ever to specific distinction. I think on the contrary that Mr. Butler's comparison of the various forms that he has collected together in his paper, goes incontestably toprove he fallacy of depending upon the mere variations of development of marking in individuals as

evidence of specific distinction. The same Author in his notes on the genus in Ann. Mag. N. H. (5). Vol. 17., p. 212, T. v. (1886) figures and describes a number of so called new species, all of which so figured, with perhaps one exception (*Gradiens*) are I should say unquestionably but varying forms of this widely distributed species.

It must be understood that I do not claim for my list anything like the full synonymy of this species, there are I believe many more names that should be included, but I have selected those that appear to me to leave no room for doubt.

NOTE ON SOME UNDESCRIBED AUSTRALIAN LEPIDOPTERA (RHOPOLOCERA);

By W. H. MISKIN, F.E.S.

Sub Fam.—PERINÆ. Genus—ELODINA (Felder).

E. PERDITA, n. sp.

UPPERSIDE—Pearly white.

Primaries—With an apicial black band extending about three-fourths down outer margin narrowing to a point, slightly sinuated on inner side; base, and a short distance along costa light brown.

Secondaries-Without markings of any kind.

UNDERSIDE—As above.

Primaries—With the apical and outer marginal band indistinctly showing through; base slightly sulphurish.

Secondaries—Wholly smooth neutral tint; a small black spot at termination of cell; a transverse curved irregular band of indistinct darker colour, crossing middle of cell; another more distinct beyond cell—subject to considerable variation in development of last described markings.

Exp.-17-20 lines.

Hab. — Port Denison (N. Queensland). Coll. — Miskin. This species approaches nearest to Parthia, but is devoid of the white strigæ on underside of secondaries, and is otherwise well distinguished from that species.